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EXAMINER				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,846

Applicant(s)

ROESSLER ET AL.

Examiner

Samir Termanini

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7,9,11-15,17-19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,9,11-15,17-19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-544)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

BACKGROUND

1. This Office Action is responsive to the following communications: Pre-Brief Appeal Conference decision (mail dated:10/30/2009).

2. Claims 1, 2, 4-5, 7, 9, 11-15, 17-19, 21 and 22 are pending.

3. A conference has been held in response to the Pre-Appeal Brief Request for Review filed 10/14/2009. Accordingly, the previous Non-Final Action (mail dated: 9/3/2009) is hereby withdrawn. In this Office action, new grounds of rejection are made, addressed in detail below.

CLAIM REJECTIONS-35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 2, 4-5, 7, 9, 11-15, 17-19, 21 and 22** are rejected under 35 U.S.C. 103(a) as being obvious over *Robothamv et al.* (PG-Pub. 2002/0015042 A1) in view of *Brandenberg et al.* (US 2003/0063072 A1).

I. Scope of the Prior Art and the Level of Ordinary Skill

Robothamv et al. relates to display of visual content on a client device using server-side rasterization of visual content. Visual content is rendered on a server system, transformed into bitmaps compatible with the display attributes of a client device, and transmitted for display on the client device. The invention allows the server to perform, in effect, as a remote browser for displaying Web pages, e-mail, e-mail attachments, electronic document and forms, database queries and results, drawings, presentations, and images at the client device. The approach is "remote" because the server does the rendering and the client provides the interface; "multi-level" because rendered visual content is represented as a multi-level set of raster representations; and constitutes a "browsing system" because the client and server share data about the source visual content element being browsed, and the client performs a specific browsing function assisted by the server.

Brandenberg et al. relates to a method and apparatus wherein a software scheduling agent resides on a communication network and/or client device, such as location-aware wireless communication appliances, television set top boxes, or other end user client devices is disclosed. The software scheduling agent is part of a probabilistic modeling system in which the scheduler operates to perform constrained random variation with selection. Digital content is generated, organized, and stored on the communication network and/or the client devices. An electronic digital content wrapper, which holds information in the form of data and metadata related to the digital content is associated with each item of digital content. Contextual profiles for each user and each item of digital content are established by the users and the network and maintained by a service provider on the communication network.

II. Obviousness and Analysis of Claimed Differences

As to independent **claim 1**, *Robothamv et al.* describe(s): a computer program product ("...computer program...", para. [0058]), tangibly embodied in a computer-readable storage medium ("...mass storage device ...," para. [0059]), comprising instructions operable on a client computer to: provide on a client computer a user interface for a computer program application ("...client device...", para. [0002]), the user interface being operable to receive input from a user interacting with the client and from the input to generate user interaction events ("...event processing functions...", para. [0108]); identify on the client one or more future user interaction events they may occur while the user interface is in a current user interface state ("...at different states of play or a transaction at different stages of processing...", para. [0106]), estimate a likelihood for the future user interaction events to generate one or more future user interface states ("...a context and state for coordinating different functions of the browser...", para. [0075]); store the one or more future user interface states for later use ("...later time ...," para. [0235]); corresponding to the generated future user interface states while the user interface is in the current user interface state ("...Each remote browsing session has associated browsing session data 40 that maintains the context and state of the remote browsing session...", para. [0131]); and store the one or more future user interface appearances for later use ("...In a further embodiment, additional events received during client event processing are queued for later processing...", para. [0269])

Robothamv et al. differ from claim 1 in that they do not clearly address determining an estimated likelihood for the future user interaction events to occur based on a history of previous user inputs to the user interface and select one or more of the

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future user interaction events to pre-process based on the estimated likelihoods for the future user interaction events.

Brandenberg et al. has been cited for teaching:

[0403] Self-routing is used to direct a content item to all destinations (i.e., users) that the system predicts will need or want the content item. No specific destinations are targeted.

[0404] These predictions are formed in the process of making probabilistic content selections for individual users using several types of information about the content items, content item interrelationships, and users.

[0733] On the other hand, schedulers 451 and 453 allow for and encourage certain types of "predictive" changes. As contextual user profiles 411 and 417 are compiled, network 11 is better able predict far in advance the types of digital content which may be or could be of interest to the users, even before the users actually develop an interest in such subject matter. This allows network 11 to "lead" the user to digital content which may be of interest to the user based upon inferences generated from contextual user profiles 411 and 417. This contrasts with the reactive changes discussed above which can be considered a form of "lagging" behind changes in the users' conditions. Predictive changes in schedulers 451 and 453 can be useful in targeted advertising as the information for all users can be analyzed and patterns can be determined for likes, dislikes, and preferences from the aggregated data of thousands of users. One example would be the advertisement of a particular book or type of music based upon a statistically reliable inference that users which like one type of book or music may also like another type of book or music which is somehow stylistically or otherwise related.

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to determine an estimated likelihood for future user interaction based on a history of previous input because *Brandenberg et al.* suggest that the user help take an active role in assisting content delivery ("The contextual digital content profiles and the contextual user profiles are continuously updated to ensure that there is a high probability that the user will be presented with digital content that he finds relevant and

interesting. The user plays an ongoing active role in the systematic scheduling of digital content," para. [0016]).

As to dependent **claim 2**, which depends from claim 1, *Robothamv et al.* further disclose: the product of claim 1, further comprising instructions to: receive an actual input from the user and, if one of the future user interface states corresponds to the actual input, render the future user interface appearance corresponding to the first user interface state ("...comparing time-stamps between the current visual content element 10 and the cached representation;...", para. [0321]; "...accessing refresh data associated with the current visual content element 10....," para. [0321]).

As to dependent **claim 4**, which depends from claim 1, *Robothamv et al.* further disclose: the product of claim 1, wherein the instructions to generate code to render the first user interface states:

[0010] For example, an HTML document can be rendered by an HTML rendering function in one rasterizing mode. This HTML source can also be transcoded to a WML (Wireless Markup Language) format and then rasterized by a WML rendering function in a second rasterizing mode. The two different representations can be associated as a multi-modal set, based on their relationship to the original HTML-encoded visual content element.

[0011] Transcoding can also be used to generate a different version of the source visual content element using the same encoding format as the original. For example, an HTML document can be transcoded into another HTML document, while changing, translating or removing certain encoded data. For example, references to unwanted or objectionable content can be removed, automatic language translation can be applied to text components, or layout directives can be removed or changed to other layout directives.

As to dependent **claim 5**, which depends from claim 4, *Robothamv et al.* further disclose: the product of claim 4 wherein the code to render the first user interface state comprises HTML (Hypertext Markup Language) code ("...The format of the text-related content can be represented in a specialized format, a subset of a standard format, such as HTML..., " para. [0529]).

As to dependent **claim 7**, which depends from claim 1, *Robothamv et al.* further disclose: the product of claim 1, further comprising instructions to: specify an order for pre-processing future user interaction events based on the estimated likelihoods that the future user interaction events will occur.

"...In one embodiment, the data transmission is sequenced in a manner allowing an overview representation to arrive first, thereby providing the client 24 device with an opportunity to display the overview representation while other representations are transmitted....."

(para. [0189]).

As to dependent **claim 9**, which depends from claim 1, *Robothamv et al.* further disclose: the product of claim 8, wherein: the user interface comprises a control having instructions to establish the estimated likelihood for the future user interaction events f ("...generating multiple client display surfaces (stored in main memory and/or in mass storage) that collectively represent the single virtual client display surface 26..., " para. [0146]); ("...implementation of prioritized viewing for selection ..., " para. [0208]).

As to dependent **claim 11**, which depends from claim 1, *Robothamv et al.* further disclose: the product of claim 1, wherein: the instructions to pre-process the selected future user interaction events to generate one or more future user interface states comprise instructions to obtain data from the application for future user interface states ("...obtains information specifying the dimensions and display characteristics of the client viewport, and explicitly represents the client viewport 16..., " para. [0126]).

As to dependent **claim 12**, which depends from claim 1, *Robothamv et al.* further disclose: the product of claim 1, wherein the instructions to each of the selected future user interaction events has estimated likelihoods of occurrence exceeding a threshold probability and the future user interaction events other than the selected future user interaction events have estimated likelihoods that do not exceed the threshold probability:

"For example, this user initiated preference information may be used to update the user's contextual user profile, thereby affecting the probability that the same digital content will be offered again for presentation to the user, or the probability that related digital content will be offered for presentation to the user. This preference information may also be used by service provider to perform or infer referential preferences as explained above. In this manner, one user's responses may have an affect or impact upon other members' experiences, thereby expanding network 11 and creating community.,"

(para. [0967]).

"The candidate selection process is probabilistic, blending new content varieties with known preferences, and is based on historic ratings of content of this user and those users he selected as having similar tastes. This historic content's wrappers and ratings include information about content categories, features, and time and space relevancies.,"

(para. [0515]).

As to dependent **claim 13**, which depends from claim 1, *Robothamv et al.* further disclose: the product of claim 1, wherein: the computer program product is a program running on a server computer in data communication with the client computer ("...The user experience differs from the user experience in which the client 22 propagates the same location events to the server 22..., " para. [0287]); and the instructions to provide a user interface on the client computer comprise instructions to provide the user interface in a Web browser ("...In some embodiments, server-side rendering is accomplished using a web browser..., " para. [0157]).

As to independent **claim 14**, *Robothamv et al.* describe(s);, the user interface being operable to receive input from a user interacting with the client and from the input to generate user interaction events ("...event processing functions..., " para. [0108]);

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[0297] If switches between representation levels are handled on the client device 24, the client 24 can echo a selection event to the server 22, since it contains useful information about current client 24 activity.

[0299] Client-side Caching of Derived Representations

[0300] When the client 24 is caching derived representations, interface 9 determines which caches are valid and when it is appropriate to request refreshed versions from the server 22. A cache validation scheme can be based on the "age" of a cached representation. The age is defined as the difference between the current time and the time when the cached representation was received from the server 22. In one embodiment, the client 24 requests a refresh when the age exceeds a certain threshold. The aging threshold can be set by the server 22 and sent to the client or, alternatively, be set by the client 24 or the client user.

identifying on the client one or more future user interaction events while the user interface is in a current user interface state ("...at different states of play or a transaction at different stages of processing...", para. [0106]), the future user interaction events being user interaction events that would arise from an input the user interface could possibly receive from the user, in the current user interface state, from the user pre-processing one or more of the future user interaction events to generate one or more future user interface states ("...Each remote browsing session has associated browsing session data 40 that maintains the context and state of the remote browsing session...", para. [0131]); storing the one or more future user interface states for later use, pre-rendering one or more of the future user interface states to generate one or more future user interface appearances while the user interface is in the current user interface state ; and storing the one or more future user interface appearances for later use ("...In a further embodiment, additional

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events received during client event processing are queued for later processing....," para. [0269]).

Robothamv et al. differ from claim 1 in that they do not clearly address determining an estimated likelihood for the future user interaction events to occur based on a history of previous user inputs to the user interface and select one or more of the future user interaction events to pre-process based on the estimated likelihoods for the future user interaction events.

Brandenberg et al. has been cited for teaching:

[0403] Self-routing is used to direct a content item to all destinations (i.e., users) that the system predicts will need or want the content item. No specific destinations are targeted.

[0404] These predictions are formed in the process of making probabilistic content selections for individual users using several types of information about the content items, content item interrelationships, and users.

[0733] On the other hand, schedulers 451 and 453 allow for and encourage certain types of "predictive" changes. As contextual user profiles 411 and 417 are compiled, network 11 is better able predict far in advance the types of digital content which may be or could be of interest to the users, even before the users actually develop an interest in such subject matter. This allows network 11 to "lead" the user to digital content which may be of interest to the user based upon inferences generated from contextual user profiles 411 and 417. This contrasts with the reactive changes discussed above which can be considered a form of "lagging" behind changes in the users' conditions. Predictive changes in schedulers 451 and 453 can be useful in targeted advertising as the information for all users can be analyzed and patterns can be determined for likes, dislikes, and preferences from the aggregated data of thousands of users. One example would be the advertisement of a particular book or type of music based upon a statistically reliable inference that users which like one type of book or music may also like another type of book or music which is somehow stylistically or otherwise related.

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to determine an estimated likelihood for future user interaction based on a history of previous input because *Brandenberg et al.* suggest that the user help take an active role in assisting content delivery ("The contextual digital content profiles and the contextual user profiles are continuously updated to ensure that there is a high probability that the user will be presented with digital content that he finds relevant and interesting. The user plays an ongoing active role in the systematic scheduling of digital content," para. [0016]).

As to dependent **claim 15**, which depends from claim 14, *Robothamv et al.* further disclose: the method of claim 14, further comprising: receiving an actual input from the user and, if one of the future user interface states corresponds to a user interaction event that arises from the actual input from the user, make the corresponding one of the future user interface states the current user interface state ("...the server sends the corresponding partial raster representation to client for browsing...", para. [0027]).

As to dependent **claim 17**, which depends from claim 14, *Robothamv et al.* further disclose: the method of claim 14, further comprising: specifying an order for pre-processing the future user interaction events ("...pre-rendering step...", para. [0018]).

As to independent **claim 18**, *Robothamv et al.* describe(s): An apparatus, comprising: a means for implementing a user interface for a computer program application ("...executable computer program instructions...", para. [0060]), the user interface being operable to receive input from a user interacting with the client and from the input to generate user interaction events ("...event processing functions...", para.

[0108]), means for identifying one or more future user interaction events while the user interface is in a current user interface state ("...at different states of play or a transaction at different stages of processing....," para. [0106]), the future user interaction events being user interaction events that would arise from an input the user interface could possibly receive ("...If a relevant proxy display surface 28 has already been generated for the entire visual content element, then only the transform and possibly transmission functions need to be performed....," para. [0505]), in the current user interface state ("...context and state ...," para. [0075]), means for pre-processing one or more of the future user interaction events to generate one or more future user interface state; and means for storing the one or more future user interface states for later use ("In one embodiment, the client 24 requests a refresh when the age exceeds a certain threshold.," para. [0300]); means for pre-rendering one or more of the future user interface states to generate one or more future user interface appearances while the user interface is in the current user interface state ("...The likelihood of a stale cache is increased in the third approach. In one embodiment, the client 24 requests that the server 22 determine if a refresh is recommended, and if so indicates to the user that a "stale" cached version is being displayed until the refresh arrives....," para. [0285]); and means for storing the one or more future user interface appearances for later use ("...In a further embodiment, additional events received during client event processing are queued for later processing....," para. [0269]) a processor for implementing at least the means for pre-processing.

Robothamv et al. differ from claim 1 in that they do not clearly address a means for determining an estimated likelihood for the future user interaction events to occur

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based on a history of previous user inputs to the user interface and select one or more of the future user interaction events to pre-process based on the estimated likelihoods for the future user interaction events.

Brandenberg et al. has been cited for teaching those means:

[0403] Self-routing is used to direct a content item to all destinations (i.e., users) that the system predicts will need or want the content item. No specific destinations are targeted.

[0404] These predictions are formed in the process of making probabilistic content selections for individual users using several types of information about the content items, content item interrelationships, and users.

[0733] On the other hand, schedulers 451 and 453 allow for and encourage certain types of "predictive" changes. As contextual user profiles 411 and 417 are compiled, network 11 is better able predict far in advance the types of digital content which may be or could be of interest to the users, even before the users actually develop an interest in such subject matter. This allows network 11 to "lead" the user to digital content which may be of interest to the user based upon inferences generated from contextual user profiles 411 and 417. This contrasts with the reactive changes discussed above which can be considered a form of "lagging" behind changes in the users' conditions. Predictive changes in schedulers 451 and 453 can be useful in targeted advertising as the information for all users can be analyzed and patterns can be determined for likes, dislikes, and preferences from the aggregated data of thousands of users. One example would be the advertisement of a particular book or type of music based upon a statistically reliable inference that users which like one type of book or music may also like another type of book or music which is somehow stylistically or otherwise related.

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to determine an estimated likelihood for future user interaction based on a history of previous input because *Brandenberg et al.* suggest that the user help take an active role in assisting content delivery ("The contextual digital content profiles and the contextual user profiles are continuously updated to ensure that there is a high

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probability that the user will be presented with digital content that he finds relevant and interesting. The user plays an ongoing active role in the systematic scheduling of digital content," para. [0016]).

As to dependent **claim 19**, which depends from claim 18, *Robothamv et al.* further disclose: the apparatus of claim 18, further comprising: means for receiving an actual input from the user and, if one of the future user interface states corresponds to a user interaction event that arises from the actual input from the user, making the corresponding one of the future user interface states the current user interface state ("...accessing refresh data associated with the current visual content element 10....," para. [0321]).

As to dependent **claim 21**, which depends from claim 18, *Robothamv et al.* further disclose: the apparatus of claim 18, further comprising: means for specifying an order for pre-processing the future user interaction events:

"...In one embodiment, the data transmission is sequenced in a manner allowing an overview representation to arrive first, thereby providing the client 24 device with an opportunity to display the overview representation while other representations are transmitted....,"

(para. [0189]).

As to dependent **claim 22**, which depends from claim 12, *Robothamv et al.* further disclose: the product of claim 12, further comprising instructions for raising or lowering the threshold ("Similar mechanisms allow the client 24 user to select a lower level representation from a higher level representation. Selection events include user interface actions such as mouse "clicks," pen clicks, or button presses.," para. [0201]).

RESPONSE TO ARGUMENTS

6. Applicant's arguments made in the Pre-Appeal Brief Request for Review filed 10/14/2009 have been fully considered.

Specifically, Applicant argued:

Applicants filed a Reply to Office Action on June 17, 2009 ("the Reply"), pointing out numerous deficiencies of Robotham. In the Reply, Applicants separately traversed the rejection of dependent claim 12, pointing out several features of claim 12 that are clearly not taught or suggested by Robotham (Reply at page 13)...In the Final Office Action, the Examiner includes a "Response to Arguments" section, but does not address Applicants' position with respect to claim 12 (Final Office Action at pages 11-12).

Those specific *Pre-Appeal Brief Request* arguments are being provided again below:

Dependent claim 12 is further distinguishable from Robotham. Claim 12 recites "each of the selected future user interaction events has estimated likelihoods of occurrence exceeding a threshold probability, and the future user interaction events other than the selected future user interaction events have estimated likelihoods that do not exceed the threshold probability" (emphasis added). As discussed, Robotham discloses a "cache validation scheme" where the client requests refreshed data from the server whenever the age of the data at the client exceeds a certain threshold (Robotham, ¶ 300). However, Robotham's threshold simply constitutes an amount of time that expires before the client requests refreshed data from the server (Robotham, ¶ 300). Robotham's threshold is thus not a threshold probability, but at best a threshold time. Therefore, Robotham does not teach or even suggest "each of the selected future user interaction events has estimated likelihoods of occurrence exceeding a threshold probability, and the future user interaction events other than the selected future user interaction events have estimated likelihoods that do not exceed the threshold probability," as recited by dependent claim 12 (emphasis added).

Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection above. It is noted that a new reference

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(*Brandenberg et al.*) has been cited for suggesting this limitation (Please see new grounds of rejection in the treatment of claim 12, above).

Applicant further argued:

Claim 1 recites a combination of elements including, for example, instructions for "estimat[ing] a likelihood for the future user interaction events to occur based on a history of previous user inputs to the user interface" (emphasis added). Robotham does not teach or even suggest at least this feature of claim 1.

It is noted that a new reference (*Brandenberg et al.*) has been cited for suggesting this limitation (Please see new grounds of rejection in the treatment of claim 1, above).

CONCLUSION

7. All prior art made of record in this Office Action or as cited on form PTO-892 notwithstanding being relied upon, is considered pertinent to applicant's disclosure.

- [1] *Barrett et al.* (US Patent No. 5,727,129) for teaching a system that tracks a user's past history of websites visited, including the frequency and dates and times of visits, in order to predict what web information is likely to be accessed by the user in the future.
- [2] *Smith et al.* (US Patent No. 6,742,033 B1) for teaching a that network delivered/based content can be sped up to pre-cache internet content where pre-caching internet content may mean downloading information from the internet that the system predicts that the user will request in the future.
- [3] *Aaker et al.* (US Patent No. 5,758,087 A) for teaching a computer, e.g. a server or computer operated by a network provider sends one or more requesting computers (clients) a most likely predicted-to-be selected (predicted) page of information by determining a preference factor for this page based on one or more pages that are requested by the client.
- [4] *Mogul* (US Patent No. 5,802,292 A) for teaching a method for predictive pre-fetching of objects over a computer network.
- [5] *O'Brien et al.* (US Patent No. 6,055,569 A) for teaching a browser working in conjunction with a HTTP server that selectively downloads WWW pages into the browser's memory cache by evaluating the weight to

a predetermined browser criteria so only those pages most probably to be downloaded are stored in the browser's memory cache.

- [6] *Horvitz* (US Patent No. 6,067,565 A) for teaching a technique for pre-fetching a web page of potential future interest in lieu of continuing a current information download.
- [7] *Horvitz* (US Patent No. 6,085,226 A) for teaching a method and apparatus for utility-directed prefetching of web pages into local cache using continual computation and user models.
- [8] *Altschuler et al.* (US Patent No. 6,154,767 A) for teaching building a resource (such as Internet content for example) and attribute transition probability models and using such models to predict future resource and attribute transitions.

Therefore, Applicant is required under 37 CFR §1.111(c) to consider these references fully when responding to this Office Action.

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini at telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 6 P.M., Monday through Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samir Termanini/
Examiner, Art Unit 2179

/Weilun Lo/

Supervisory Patent Examiner, Art Unit 2179